

Title (en)
NANOPARTICLE-ENHANCED LEAD-ACID ELECTRODE PASTE AND IMPROVED LEAD-ACID BATTERIES MADE THEREFROM

Title (de)
MIT NANOPARTIKELN VERSTÄRKT BLEISÄUREELEKTRODENPASTE UND DARAUS HERGESTELLTE VERBESSERTE BLEISÄUREBATTERIEN

Title (fr)
PÂTE D'ÉLECTRODE PLOMB-ACIDE RENFORCÉE DE NANOPARTICULES ET BATTERIES PLOMB-ACIDE AMÉLIORÉES FAITES À PARTIR DE CETTE PÂTE

Publication
EP 4315451 A1 20240207 (EN)

Application
EP 22782419 A 20220330

Priority

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Abstract (en)
[origin: WO202213094A1] This disclosure relates to improved electrode pastes that include a carrier, basic lead sulfate compounds, and ground state metal nanoparticles formed by laser ablation (e.g., spherical-shaped nanoparticles). Improved lead-acid batteries can be made using improved electrode pastes that include a carrier, basic lead sulfate compounds, and ground state metal nanoparticles formed by laser ablation. Methods for manufacturing lead-acid batteries of improved performance include applying an improved electrode paste to a least a portion of the positive and/or negative electrodes, placing the electrodes in a container, and placing an electrolyte in contact with the electrodes. The metal nanoparticles may comprise or consist of gold. The metal nanoparticles may be spherical-shaped and/or coral-shaped.

IPC 8 full level
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Citation (search report)
See references of WO 202213094A1

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